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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,146

02/11/2005

Gerard Thevenot

0541-1038

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466

7590

11/21/2006

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EXAMINER

SOLD, JENA A

ART UNIT

PAPER NUMBER

3765

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/524,146

Applicant(s)

THEVENOT, GERARD

Examiner

Jena A. Sold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/11/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse in the reply filed on 8/25/06 is acknowledged.

### ***Drawings***

2. The drawings are objected to because they fail to show specific features of the invention in terms of the elected embodiment. Specifically, elements such as frame 2, tubular elements 3, 4, outer wall 5, and valve 6 should be illustrated with regard to a chasuble garment as elected.

### ***Claim Objections***

3. Applicant has elected a device for body protection means, specifically a chasuble-type body garment, as illustrated in Figure 3. Applicant's amended claims, however, are not directed to an airbag *garment*, to be worn on a person, as has been elected, but rather claim broadly an "airbag device for body protection means."
4. Additionally, certain limitations within the first claim appear to be directed at a device or garment other than the elected chasuble garment. Reference characters 111, 112a, and 112b, for example, are associated with Figures 6 and 7, which, as transport means, have not been elected.

5. Claim 1 also specifies a number of main elements described in the specification but not illustrated with respect to the chasuble device in Figure 3, such as a frame 2, tubular elements 3, 4, outer wall 5, and valve 6. The applicant intends the chasuble garment to have the same structural features as the garment illustrated in Figure 1, which contains the reference numerals cited in claim 1, as said features are discussed with regard to the chasuble device, specifically frame 2 and tubular elements 3, 4 (page 6, line 34 – page 7, line 17). The placement and construction of these features in a chasuble-type garment is vague and unclear, however, and should thus be illustrated in the drawings in terms of the elected invention.

6. Applicant claims “said tubular element 3, 4 being initially folded in a container” before the tubular element 3, 4 is inflated (claim 1). It is unclear if the container to which applicant refers is a container such as a waist pack, backpack, or the like, or, in the alternative, the container comprises the outer wall to which the tubular elements are attached. If the former interpretation is intended, the limitation having “the container” lacks antecedent basis, as the drawings neither illustrate such a container nor depict the airbag device’s relation thereto. Additionally, the specification discloses a motorcyclist has already put on the chasuble so that the device is in place when said motorcyclist hits an obstacle (page 7, lines 7-8), which appears to contradict the claim limitation that specifies the tubular elements comprising the frame initially stored in a container. For these reasons, the container of said tubular elements is construed as the outer wall of the safety device.

7. Additionally, it is suggested that applicant remove the reference characters from the claims in order to make the claims easier to read and understand. Specifically, certain components of the invention are referred to in different claims by different reference numbers, which correspond to different figures. For instance, a valve is referred to as "valve (6)" in claims 12 –15 and 17-19, and "valve (16)" in claim 16.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 12-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amarantos (US 3895396). Amarantos discloses an expandable protective device A, present applicant's airbag device, having a source of compressed gas or air secured to the device (column 5, lines 11-12), present applicant's inflating means, contained in container F (column 3, lines 17-19) so as to allow inflation upon impact. Additionally, expandable protective device A comprises a number of resilient helical springs E, present applicant's at least one tubular element constituting a frame. As said helical springs E, disposed in parallel circumferentially spaced positions in device A, are bonded to the surface of pliable exterior sheet 10 (column 2, lines 51-54), present applicant's outer wall, and tend to support device A when inflated, said springs

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E give the frame form when inflated (column 3, lines 8-16). Device A, having helical springs E comprising the frame of the device, is initially worn in a compact rolled configuration encircling the waist of user B (column 2, lines 45-47), as visible in Figure 18, wherein the outer wall which contains the helical springs is considered present applicant's container into which said helical springs are folded. As visible in the figures, device A comprises a closed chamber, inherently filled with air at atmospheric pressure. Amarantos fails to disclose, however, the device wherein a valve is disposed on the outer sheet 10. Instead, Amarantos discloses valve G associated with container F, and necessarily permitting access through the outer sheet into passages 20 and 22, as well as a number of valves D, located on the strips C, present applicant's inner wall, which allow for the passage of air from passages 20 and 22 throughout the cells 18 that comprise the device (column 3, lines 3-8). Thus, operating the valve associated with container F, having compressed gas or the like, allows said inflating means access into the passages provided with valves D and results in the inflation of protective device A, opening when the frame is inflated and closing at the time of impact. Present applicant's specification fails to reveal any criticality in the placement of the valves on the outer wall rather than an inner wall, nor does it disclose said structure to offer any particular advantage, serve any particular purpose, or solve any particular problem. So long as the device is provided an outer wall with some sort of opening to permit the inflating means access to the interior of said device, as well as one or more valves to control the flow and movement of air, the placement of said valves is inconsequential. The device A of Amarantos necessarily is provided an opening in the outer wall through

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which the compressed gas of container F is admitted into the device, as well as a series of valves D which regulate the air flow therein in the same manner as described in the present application. Thus, it would have been obvious to one of ordinary skill in the art to modify the invention of Amarantos to contain valves D on the outer wall instead of the inner wall because said construction provides more direct access between the check valves and the external environment, while still ensuring that, once inflated, the air is unable to escape.

9. Regarding claims 13-15, Amarantos discloses circumferentially spaced pliable strips C, present applicant's at least one inner wall integral with the inside face of the outer wall, and thus integral with the frame formed by helical springs E and bonded to said outer wall, as visible in Figures 3 and 4, cooperating to define enclosed cells 18 (column 2, lines 64-67). Valves D, discussed above as disposed on the inner walls rather than the outer wall, still projects and directs air into the volume delimited by the outer wall and the intermediary inner walls.

10. Regarding claim 16, as visible in Figures 5, 6 and 7; Amarantos discloses valve D includes an opening 24, present applicant's orifice, and a pliable strip of sheet material 30, secured on three sides to the strip C, thus acting as present applicant's flap (column 3, lines 31-38). As visible in Figure 6, said flap 30 is slightly larger than opening 24. The unattached side of said flap opens away from the orifice when inflating to allow the passage of air through the valve. Amarantos further discloses that after device A has inflated, it will remain in an inflated state due to valves D acting as check

valves to prevent flow of gas or air from cells 18 back into passages 22 (column 3, lines 48-51).

11. Regarding claim 18, Amarantos discloses container F having compressed gas therein (column 3, lines 17-19) for the inflation of said protective device A.

12. Regarding claim 19, Amarantos fails to disclose the inflating means comprising pyrotechnic means. However, applicant's specification discloses "Of course, the pyrotechnic means 14 can be replaced by any other equivalent means such as a carbon dioxide gas or diazonium generator whilst remaining within the scope of the invention" (page 6, lines 2-6), thus relating the pyrotechnic inflation means as a non-critical component of the invention. Thus, it would have been obvious to one having ordinary skill in the art to replace a container of compressed gas with pyrotechnic means for the purpose of inflation, because pyrotechnic devices include high power-to-weight ratio, compact size, low input energy requirements and extreme reliability ("Explosive and Pyrotechnic Devices and Their Applications, p.1), all important characteristics for a portable and effective air-bag system.

13. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amarantos (US 3895396) in view of Kirchoff. Amarantos discloses the invention substantially as claimed including expandable protective device A having an outer wall integral with a frame, and a number of inner walls integral with the framed outer wall structure. Amarantos additionally discloses check valves D comprising opening 24 and flap 30 to allow a uni-directional flow of air within said device. Amarantos fails to



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disclose a grill obstructing the orifice of the valve, which present applicant discloses is intended to prevent the flap from falling through the orifice at the time of impact (page 5, lines 3-6). Grye discloses a check valve construction wherein outlet 16, present applicant's orifice, is provided check valve 10 (column 2, lines 7-10), present applicant's flap, as well as grid 20 which extends across outlet 16 to prevent check valve 10 from moving through outlet 16 and into tube 12 while in the collapsed state (column 2, lines 41-44). Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to provide a grill or grid to the check valve opening of Amarantos, in view of the teachings of Grye, because said grid reinforces the opening and prevents the check valve flap from falling through said opening.

### ***Conclusion***

14. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is cited on form 892 enclosed herewith.

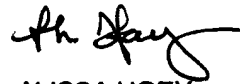
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jena A. Sold whose telephone number is (571) 272-8610. The examiner can normally be reached on Mon. - Fri. 8:30 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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